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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,950	12/18/2001	Harri Korpela	796.418USW1	5366
32294	7590	11/17/2005	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P.			YANG, LINA	
14TH FLOOR			ART UNIT	
8000 TOWERS CRESCENT			PAPER NUMBER	
TYSONS CORNER, VA 22182			2665	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/028,950	KORPELA ET AL.	
	Examiner	Art Unit	
	Lina Yang	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 9/13/2005 have been entered and made of record.
2. Claims 1-6 have been canceled. Claims 7-20 have been added. As a result, claims 7-20 are now pending in this application.

Response to Arguments

Applicant's arguments filed 9/13/2005 have been fully considered but they are not persuasive.

The following are the responses to the applicant's arguments on page 10.

(1) Acampora fails to suggest actual network planning would be done based on layers.

-In reply, Acampora discloses that the actual network planning is done based on layers, see "The network architecture presently being considered...." (col.9 lines 28-47).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2665

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 7-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Acampora et al. (U. S. Patent No. 5,530,575).

Regarding claim 7, Acampora discloses a planning arrangement for forming a communications network, the arrangement comprising a set of at least two modules ("layers" in fig. 10), each module of the set representing a technical solution usable in a layer of the communications network (fig. 10; descriptions of the layers: col. 9 lines 47-56 for layer 1000; col. 9 lines 57-67 for layer 1010; col. 10 lines 1-10 for layer 1020; col. 10 lines 30-55 for layer 1030), the arrangement configured to: allow selection of at least two modules of the set (fig. 10); and arrange said at least two modules of the set on top of each other as a layered structure for modeling the communications network to be formed (fig. 10); wherein a given module of the layered structure is configured to offer resources to an adjacent module above the given module and/or to use resources of an adjacent module below the given module (col. 9 lines 44-47).

Regarding claim 8, Acampora further discloses that the at least two modules of the set are configured to be selected based on desired technical solutions of the communications network to be formed (fig. 10; descriptions of the layers: col. 9 lines 47-56 for layer 1000; col. 9 lines 57-67 for layer 1010; col. 10 lines 1-10 for layer 1020; col. 10 lines 30-55 for layer 1030).

Regarding claim 9, Acampora further discloses that the technical solution of at least one module of the set is configured to be usable in more than one layer of the layered structure ("WDM"; col. 9 lines 28-38).

Regarding claim 10, Acampora further discloses that routing of the layered structure is configured to be performed in one module at a time such that routes in the adjacent module above are found in the given module (col.9 lines 49-52).

Regarding claim 11, Acampora discloses that a planning method for forming a communications network, the method comprising: forming a set of at least two modules ("layers" in fig. 10), each module of the set representing a technical solution usable in a layer of the communications network (fig. 10; descriptions of the layers: col. 9 lines 47-56 for layer 1000; col. 9 lines 57-67 for layer 1010; col. 10 lines 1-10 for layer 1020; col. 10 lines 30-55 for layer 1030); selecting at least two modules of the set ("layers" in fig. 10); and arranging said at least two modules of the set on top of each other as a layered structure for modeling the communications network to be formed (fig. 10); wherein a given module of the layered structure is configured to offer resources to an adjacent module above the given module and/or to use resources of an adjacent module below the given module (col. 9 lines 44-47).

Regarding claim 12, Acampora further discloses that the step of selecting comprises selecting the at least two modules of the set based on desired technical solutions of the communications network to be formed (fig. 10; descriptions of the layers: col. 9 lines 47-56 for layer 1000; col. 9 lines 57-67 for layer 1010; col. 10 lines 1-10 for layer 1020; col. 10 lines 30-55 for layer 1030).

Regarding claim 13, Acampora further discloses that routing the layered structure in one module at a time such that routes in the adjacent module above are found in the given module (col.9 lines 49-52).

Regarding claim 14, Acampora discloses a planning module (layer 1020 in fig. 10) for forming a communications network, wherein the module is a part of a set of at least two modules (layer 1020 is part of the other layers in fig. 10), the module represents a particular technical solution usable in the communications network (WDM), and the module is arranged on top of and/or below another module to form a layered structure for modeling the communications network to be formed (fig. 10 layered structure), wherein the module is configured to offer resources to an adjacent module above the given module and/or to use resources of an adjacent module below the given module (col. 9 lines 44-47).

Regarding claim 15, Acampora further discloses that the technical solution represented by the module comprises one of cellular, Asynchronous Transfer Mode, Plesiochronous Digital Hierarchy, Synchronous Digital Hierarchy, Internet Protocol, Wavelength-Division Multiplexing, and physical conduits (WDM; col. 9 lines 28-38).

Regarding claim 16, Acampora further discloses that the module comprises one of conduit module (layer 1000 in fig. 10), line system module, Virtual Container-4 module, 2Mbit/s module, Asynchronous Transfer Mode link module, Asynchronous Transfer Mode virtual path module (col. 10 lines 42-47), Asynchronous Transfer Mode virtual circuit module, Internet Protocol module, Wavelength-Division Multiplexing module (layer 1020 in fig. 10), and cellular module.

Regarding claim 17, Acampora further discloses that the module further comprising: nodes and links between the nodes ("users" and links between "users" in fig. 10).

Regarding claim 18, Acampora further discloses that the types of the nodes and links are specific for the layer (col. 9 lines 44-67 and col. 10 lines 1-55; for example, the only nodes can be seen at layer 1030 are "users", while the nodes can be seen at layer 1020 are "users" and "access stations", and the nodes can be seen at layer 1010 are "users"; "access stations" and "switches").

Regarding claim 19, Acampora further discloses that the module is configured to add a node and/or link to an adjacent module above the given module and/or to an adjacent module below the given module (col. 9 lines 44-47).

Regarding claim 20, Acampora further discloses that the module comprising module-specific calculation and routing methods (for example, the routes in layer 100 are interconnected by fiber bundles; col. 9 lines 49-50; the routes in layer 1020 are through AOTFs; col. 10 lines 3-7).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. The amended claim(s) contains new scopes. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Liu (US Patent No. 6,625,153 B1) teaches a distributed cellular communication system architecture.

Burnett et al. (US Patent No. 5,633,869) teaches a virtual network using ATM.

Sabat Jr. et al (US Patent Application Publication No. 20010036163 A1) teaches a multi-protocol distributed wireless system architecture.

Andersson et al. (US Patent No. 6,044,065) teaches a resource model and architecture for a connection handling system.

Bender et al. (US Patent No. 6,539,030 B1) teaches a method and apparatus for providing configurable layers and protocols in a communications system.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lina Yang whose telephone number is (571) 272-3151. The examiner can normally be reached Monday through Wednesday between 7:00 a.m. and 8:00 p.m. eastern standard time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LY



ALPUS H. HSU
PRIMARY EXAMINER